

U.S. PATENT AND TRADEMARK OFFICE

Applicants:

William HOLM et al.

Conf.:

7653

Serial No.:

09/901,592

Art Unit: 1762

Nguyen, Donghai D.

Filed:

July 11, 2001

Examiner:

For:

METHOD AND APPARATUS FOR APPLYING VISCOUS MEDIUM ONTO A SUBSTRATE

DECLARATION UNDER 37 C.F.R. §1.132

Assistant Commissioner for Patents Washington, DC 20231

Sir:

I, Dr. William Holm, residing at Skalbaggestigen 14A, SE-125 51 Älvsjö, Sweden do declare and say as follows:

- I am familiar with the subject matter of the above identified application (United States 1. Serial No. 09/901,592) of which I am a contributing inventor.
- In the Examiner's Office Action dated January 2, 2008, the Examiner rejects claims 2. 1, 8, 19, 20, 39 and 43 under 35 U.S.C. § 102(b) as being anticipated by Majd, U.S. Patent No. 5,155,904. I do not agree with the Examiner's rejection for the following reasons.
- The Majd reference discloses the use of a Fuji, FGL-2 Dispensing Machine for 3. applying glue dots to a substrate that has previously been screen printed with solder paste. I submit that the Fuji, FGL-2 Dispensing Machine is not a non-contact jetting machine as in the presently claimed invention. I have attached a brochure of the Fuji, FGL Dispensing Machine for the

Examiner's consideration. Therefore, the Majd reference fails to teach the present invention as recited in the independent claims of the present invention.

Referring to the attached brochure, the Fuji, FGL-II is referred to as a precision glue dispenser. One having ordinary skill in the art would recognize such a machine to be a contact "needle" dispenser, wherein the needle moves up and down in order for the dispensed fluid to contact the substrate when the needle is in the lower position and adhere to the substrate and break off from the needle when the needle is moved upwards. Thus, it is necessary for the dispensed fluid to wet and adhere to the substrate to break off and form a dot of glue at a particular location on the substrate. If insufficient wetting and/or adhesion occurs, the fluid will instead adhere to the needle and no dot will be formed on the substrate. Since a non-contact jetting device produces droplets without the need to wet any substrate, all problems associated with repeated up and down movements, as well as insufficient wetting, are avoided. In addition, on page 1 of the brochure, the description below the figure on the left discusses "excessive stringing." One having ordinary skill in the art would also recognize that excessive stringing occurs in contact "needle" dispensers, due to the glue contacting the substrate and stretching from the substrate to the needle when the needle is raised from the substrate. Furthermore, under the heading "Programmable Syringe Action" on page 1, the up and down movement is mentioned. Also, under this heading, setting of the dispensing time is discussed. This dispensing time is the way to control the amount dispensed at a certain location with a conventional needle dispenser, i.e. the longer the dispense time, the more glue will flow through the needle. The use of needles is again mentioned on page 2. All of this discussion in the

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brochure would lead one having ordinary skill in the art to the conclusion that the Fuji, FGL-II

precision glue dispenser is actually a contact "needle" dispenser. In view of this, the Majd reference

fails to disclose the use of a non-contact "jetting" device as in the presently claimed invention.

5. In view of the above, it is my opinion that the Examiner's rejections of the claims are

improper and should be reconsidered and withdrawn.

I hereby declare that all statements made herein of my own knowledge are true and

that all statements made on information and belief are believed to be true; and further that these

statements were made with the knowledge that willful false statements and the like so made are

punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States

Code and such willful false statements may jeopardize the validity of the application or any patent

issuing thereon.

Enclosure: Brochure of the Fuji, FGL-II Dispensing Machine

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